

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P397594

Luminaire Tested: **ARCH-S-PA1-100-830-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-830-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6717 lumens  
Efficiency: N/A  
Efficacy: 70.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

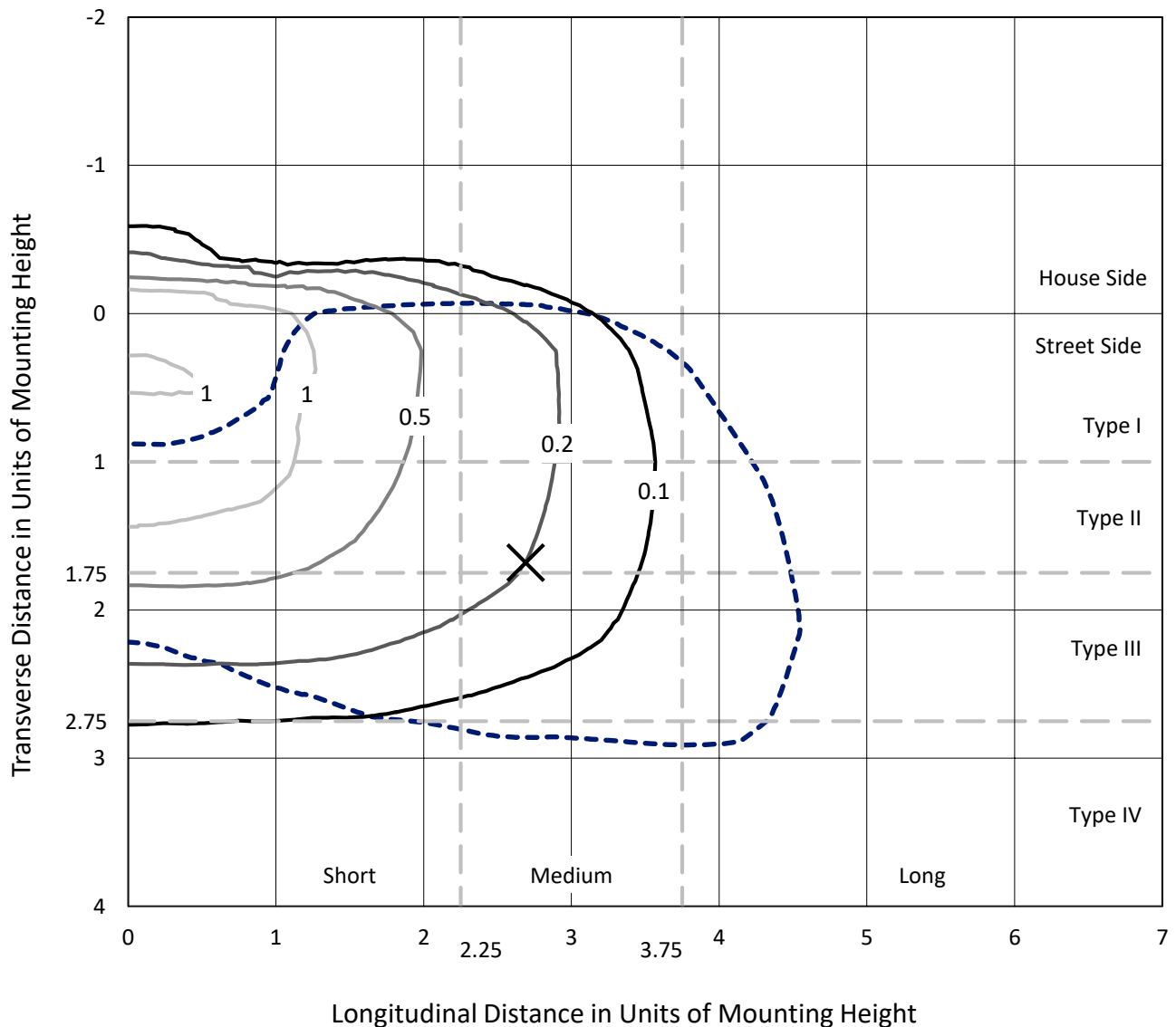
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

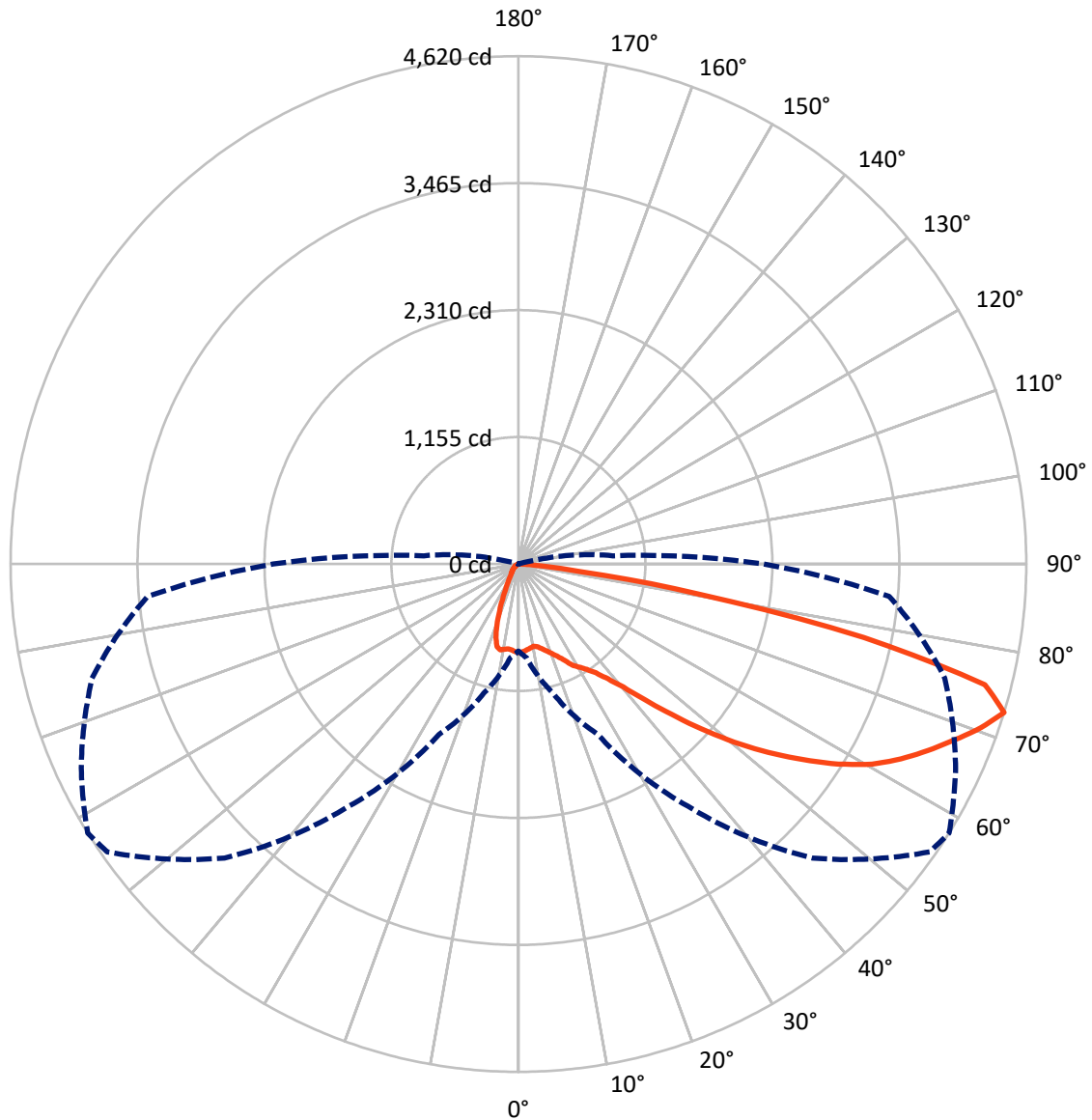
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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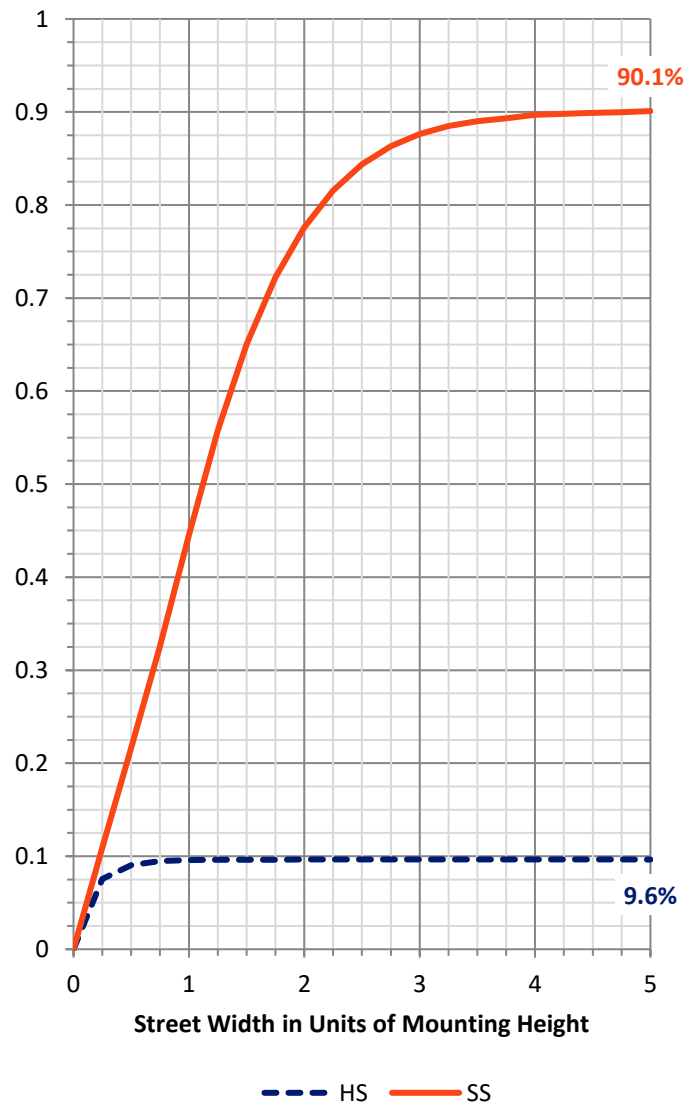
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	653.2	0.0	653.2
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	6063.8	0.0	6063.8
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	6717.0	0.0	6717.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.0	1.1
10°-20°	192.7	2.9
20°-30°	302.7	4.5
30°-40°	522.0	7.8
40°-50°	993.1	14.8
50°-60°	1572.7	23.4
60°-70°	1835.2	27.3
70°-80°	1149.4	17.1
80°-90°	75.4	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6717.0	100.0
0°-180°	6717.0	100.0



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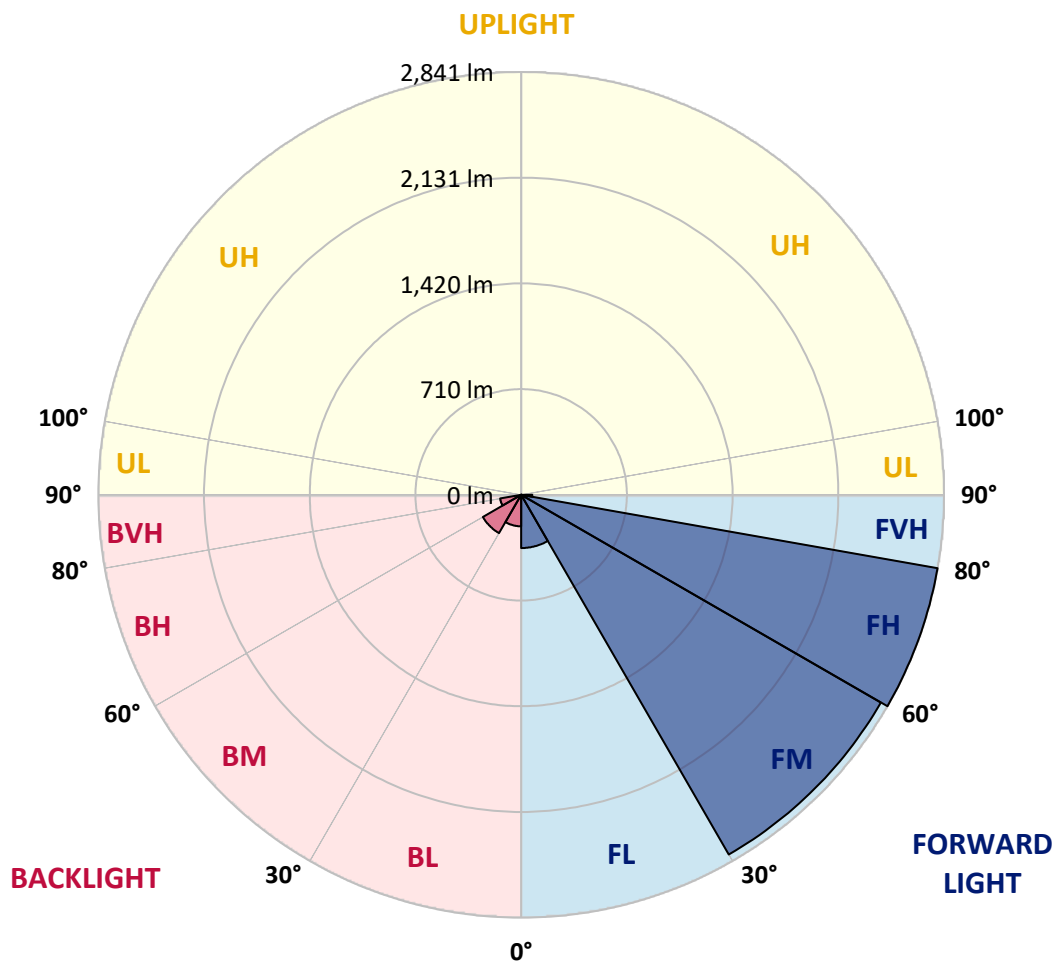
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	357.8	5.3			
FM	(30°-60°)	2790.5	41.5			
FH	(60°-80°)	2840.8	42.3			G2/5000
FVH	(80°-90°)	74.7	1.1			G1/100
BL	(0°-30°)	211.5	3.1	B1/500		
BM	(30°-60°)	297.2	4.4	B1/1000		
BH	(60°-80°)	143.7	2.1	B1/500		G1/500
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0
2.5°	802.4	798.8	797.6	796.4	797.6	798.8	795.2	798.8	796.4	797.6	800.0
5°	773.6	770.0	768.8	770.0	773.6	779.6	782.0	785.6	785.6	789.2	790.4
7.5°	741.1	738.7	737.5	739.9	747.1	760.4	767.6	772.4	777.2	784.4	791.6
10°	723.1	721.9	720.7	724.3	731.5	743.5	753.1	760.4	778.4	798.8	812.0
12.5°	711.1	711.1	713.5	720.7	730.3	739.9	762.8	772.4	800.0	831.2	849.2
15°	701.5	701.5	705.1	718.3	731.5	754.3	788.0	798.8	831.2	869.7	893.7
17.5°	694.3	696.7	699.1	712.3	737.5	776.0	815.6	831.2	870.9	912.9	939.3
20°	695.5	697.9	699.1	712.3	748.3	801.2	851.6	869.7	915.3	959.8	986.2
22.5°	702.7	706.3	707.5	725.5	767.6	827.6	892.5	912.9	962.2	1009.0	1029.4
25°	732.7	735.1	727.9	743.5	795.2	868.5	945.3	967.0	1016.2	1059.5	1076.3
27.5°	834.8	837.2	797.6	779.6	816.8	902.1	1010.2	1040.2	1101.5	1130.3	1132.7
30°	1055.8	1058.2	980.2	894.9	868.5	930.9	1046.2	1088.3	1167.6	1200.0	1185.6
32.5°	1340.5	1338.1	1231.2	1105.1	991.0	981.4	1097.9	1142.3	1228.8	1260.0	1249.2
35°	1626.4	1630.0	1538.7	1348.9	1185.6	1076.3	1164.0	1215.6	1320.1	1364.6	1345.3
37.5°	1822.2	1846.2	1806.6	1601.2	1424.6	1251.6	1270.9	1326.1	1457.0	1517.1	1476.3
40°	2098.5	2092.5	1996.4	1845.0	1688.9	1511.1	1443.8	1470.3	1620.4	1700.9	1637.2
42.5°	2469.6	2457.6	2294.3	2146.5	1972.4	1827.0	1690.1	1685.3	1807.8	1901.5	1809.0
45°	2806.0	2788.0	2676.3	2533.3	2342.3	2175.4	1990.4	1948.3	2033.6	2112.9	2004.8
47.5°	3073.8	3043.8	2964.5	2888.9	2842.0	2582.6	2305.1	2241.4	2284.7	2343.5	2191.0
50°	3391.0	3308.1	3192.8	3147.1	3244.4	3043.8	2607.8	2546.5	2544.1	2577.8	2383.2
52.5°	3535.1	3385.0	3320.1	3358.5	3530.3	3472.6	2934.5	2846.8	2812.0	2815.6	2562.1
55°	3360.9	3344.1	3378.9	3499.1	3723.7	3690.1	3248.0	3139.9	3088.3	3023.4	2733.9
57.5°	3162.7	3214.4	3352.5	3582.0	3968.7	3917.1	3556.7	3434.2	3339.3	3190.4	2924.9
60°	2980.2	3033.0	3261.2	3601.2	4103.3	4135.7	3813.8	3697.3	3556.7	3360.9	3135.1
62.5°	2702.7	2743.5	3064.2	3573.5	4044.4	4263.0	3992.8	3905.1	3774.1	3523.1	3376.5
65°	2390.4	2416.8	2733.9	3352.5	3929.1	4248.6	4140.5	4091.3	3963.9	3692.5	3615.6
67.5°	2048.0	2079.3	2343.5	2954.9	3703.3	4181.3	4279.8	4275.0	4129.7	3879.8	3788.6
70°	1654.0	1656.4	1875.1	2450.4	3309.3	4046.8	4452.8	4463.6	4288.3	4020.4	3795.8
72.5°	791.6	856.4	1215.6	1710.5	2689.5	3782.5	4565.7	4619.8	4388.0	4015.6	3386.2
75°	181.4	187.4	354.4	813.2	1577.2	2903.3	4283.4	4384.3	4145.3	3472.6	2385.6
77.5°	66.1	69.7	99.7	237.8	606.6	1500.3	3065.4	3213.2	3064.2	2245.0	1127.9
80°	44.4	43.2	51.7	105.7	278.7	425.2	1567.6	1655.2	1511.1	766.4	270.3
82.5°	22.8	24.0	36.0	58.9	187.4	147.7	523.7	569.4	468.5	153.8	50.5
85°	10.8	10.8	20.4	37.2	79.3	51.7	116.5	140.5	126.1	67.3	16.8
87.5°	10.8	10.8	19.2	24.0	40.8	21.6	28.8	36.0	33.6	36.0	6.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0
2.5°	800.0	798.8	797.6	800.0	798.8	801.2	801.2	803.6	803.6	801.2	800.0
5°	789.2	786.8	784.4	784.4	783.2	785.6	792.8	798.8	800.0	796.4	795.2
7.5°	790.4	790.4	788.0	783.2	774.8	774.8	774.8	782.0	785.6	783.2	782.0
10°	812.0	813.2	807.2	796.4	782.0	768.8	743.5	706.3	671.5	661.9	658.3
12.5°	849.2	850.4	838.4	819.2	789.2	711.1	615.0	526.1	457.7	438.4	434.8
15°	893.7	894.9	873.3	842.0	750.7	569.4	426.4	325.5	265.5	251.0	249.8
17.5°	939.3	936.9	904.5	844.4	636.6	403.6	259.5	207.8	192.2	188.6	189.8
20°	983.8	976.6	932.1	800.0	490.1	264.3	189.8	177.8	174.2	171.8	171.8
22.5°	1024.6	1010.2	954.9	712.3	343.5	189.8	169.4	167.0	162.2	158.6	157.4
25°	1065.5	1045.0	969.4	598.2	230.6	165.8	159.8	155.0	148.9	144.1	142.9
27.5°	1114.7	1085.9	962.2	454.1	173.0	153.8	148.9	141.7	133.3	126.1	123.7
30°	1161.6	1129.1	921.3	313.5	147.7	141.7	134.5	123.7	112.9	104.5	102.1
32.5°	1220.4	1183.2	848.0	205.4	128.5	123.7	116.5	103.3	88.9	79.3	76.9
35°	1304.5	1262.5	754.3	144.1	112.9	104.5	94.9	80.5	64.9	57.7	56.5
37.5°	1422.2	1365.8	636.6	116.5	99.7	87.7	73.3	58.9	48.0	42.0	40.8
40°	1566.4	1479.9	505.7	103.3	88.9	73.3	55.3	42.0	34.8	30.0	30.0
42.5°	1722.5	1586.8	372.4	94.9	78.1	60.1	40.8	30.0	25.2	22.8	21.6
45°	1883.5	1681.7	251.0	87.7	68.5	45.6	28.8	20.4	16.8	16.8	15.6
47.5°	2050.4	1745.3	162.2	79.3	57.7	33.6	19.2	14.4	12.0	12.0	12.0
50°	2216.2	1779.0	115.3	72.1	46.8	22.8	14.4	10.8	9.6	9.6	9.6
52.5°	2336.3	1757.3	92.5	62.5	36.0	16.8	10.8	8.4	7.2	7.2	7.2
55°	2440.8	1720.1	80.5	54.1	26.4	12.0	8.4	7.2	6.0	6.0	6.0
57.5°	2547.7	1672.1	72.1	45.6	19.2	8.4	6.0	4.8	4.8	4.8	4.8
60°	2645.0	1590.4	62.5	36.0	13.2	6.0	4.8	3.6	3.6	3.6	3.6
62.5°	2739.9	1520.7	54.1	27.6	9.6	4.8	2.4	2.4	1.2	1.2	1.2
65°	2794.0	1427.0	43.2	18.0	6.0	3.6	1.2	1.2	0.0	0.0	0.0
67.5°	2777.2	1315.3	30.0	10.8	3.6	2.4	1.2	0.0	0.0	0.0	0.0
70°	2660.6	1165.2	18.0	6.0	3.6	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	2228.2	862.5	10.8	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0
75°	1488.3	396.4	6.0	3.6	1.2	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	681.1	118.9	3.6	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	136.9	31.2	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.8	6.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)